

Appl. No. 10/062,584  
Amnt. dated April 21, 2004  
Reply to Office Action of Feb. 27, 2004

### **REMARKS/ARGUMENTS**

Applicant hereby requests reconsideration and withdrawal of the final rejection of all claims in this application as being premature. A telephone interview with the Examiner and Examiner's supervisor was conducted on April 20, 2004, in which the Examiners agreed that none of the art of record includes all of the elements of the broadest claim, claim 1. In particular, none of the cited references shows the particular range achieved by the amplifier as specified in claim one.

#### **Claim Rejections under 35 USC §102**

Applicant submits that Mollenauer does not show each the elements of the independent claims. To give one example, Mollenauer does not disclose a system capable of amplifying from on the order of  $10^{-9}$  Joules to on the order of  $10^{-3}$  Joules, as specified in the independent claims.

#### **Claim Rejections under 35 USC §103**

Applicant submits that the combination of Mollenauer, Weingarten et al and Plaessmann et al do not render the claims obvious, and has submitted an affidavit by an expert in the field of lasers to that effect.

There is no suggestion in any of the references, alone or in combination, to use cryo-cooling to achieve the kinds of performance the present application

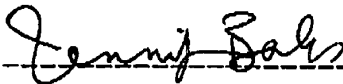
achieves in a single stage, as specified by the independent claims.

Claim Rejections under 35 USC §112.

Applicant submits that the claim rejections for indefiniteness are incorrect. Examiner states that the structure of the amplifier is not clear. Yet Claim 1 specifies that an oscillator provides input light to be amplified, an amplifier amplifies the light, and a pump laser pumps the amplifier. The terms "amplifier," "pump laser," and "oscillator" are well known to those skilled in the art of lasers. The relationship between these elements is laid out in the claim. The Examiner can refer to Figure 1 of the application if any uncertainty remains. Applicant submits that the structure is quite definite and clear.

As all of the claims now in the application appear to be in condition for allowance, applicant respectfully requests that the application be allowed and passed to issue as soon as possible.

Respectfully submitted,  
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By -----

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